

LPDES PERMIT NO. LA0000914, AI No. 1395

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name:** Lion Copolymer, LLC
 Baton Rouge Plant
 5955 Scenic Highway
 Baton Rouge, LA 70805-2044
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
 Office of Environmental Services
 Post Office Box 4313
 Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Jenniffer Sheppard
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Date Prepared: January 24, 2007

IV. Permit Action/Status:**A. Reason For Permit Action:**

Proposed reissuance of an Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. NPDES permit - NPDES permit effective date:** N/A
NPDES permit expiration date: N/A
- EPA has not retained enforcement authority.
- C. LPDES permit - LPDES permit effective date:** December 1, 2001
LPDES permit expiration date: November 31, 2006

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- D. Application received on November 27, 2006. Additional information received on February 27, 2007. E-mail correspondence received on March 20, 2007, March 28, 2007, and April 27, 2007.

V. Facility Information:

- A. Location - 1836 Shada Avenue in Baton Rouge

- B. Applicant Activity -

According to the application, Lion Copolymer, LLC, Baton Rouge Plant, is a synthetic rubber manufacturing facility that manufactures 1,250,000 pounds per day of styrene/butadiene (SBR) and 500,000 lbs/day of acrylonitrile/butadiene (NBR) rubber by an emulsion process.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Rubber Manufacturing Point
 Source Category, Subpart B
 Emulsion Crumb Rubber Subcategory

Reference

40 CFR 428.22 (BPT),
 428.23 (BAT)

Process Flow - 2.272 MGD (Max 30 Day Flow)

The permittee is a member of the Rubber Manufacturing Point Source Category. Final effluent limitations guidelines for this industry were promulgated February 21, 1974. The permittee is subject to the effluent limitations at 40 CFR 428, Subpart B, Emulsion Crumb Rubber Subcategory, for the manufacturing of styrene/butadiene rubber (SBR). However, this category specifically excludes the applicability of these guidelines to the manufacturing of acrylonitrile/butadiene rubber (NBR), which is equal to approximately 29% of the plant's daily production capacity. Therefore, current limitations were based on a combination of promulgated guidelines and best professional judgment (BPJ), in accordance with LAC 33:IX.2707 and LAC 33:IX.3701.

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

Best Professional Judgement

- D. Fee Rate -
 1. Fee Rating Facility Type: major
 2. Complexity Type: V
 3. Wastewater Type: II
 4. SIC code: 2822
- E. Continuous Facility Effluent Flow - 2.7 MGD (Max 30-Day)

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VI. Receiving Waters: Monte Sano Bayou, thence to the Mississippi River

1. TSS (15%), mg/L: 22.80
2. Average Hardness, mg/L CaCO_3 : 148.46
3. Critical Flow, cfs: 0.91
4. Mixing Zone Fraction: 1
5. Harmonic Mean Flow, cfs: 4.0
6. River Basin: Mississippi River, Segment No. 070504
7. Designated Uses:

The designated uses are secondary contact recreation and limited aquatic life and wildlife use.

Information based on the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data come from monitoring station number 1115 at Scenic Highway, just South of Lion Copolymer, 1.2 miles south of Scotlandville, Louisiana listed in Hardness and TSS Data for All LDEQ Ambient Stations for the Period of Record as of March 1998, LeBlanc. This information was also provided in a memorandum from Brian Baker (LDEQ) to Jennifer Sheppard (LDEQ) dated January 9, 2007 (See Appendix D).

VII. Outfall Information:

Outfall 001

- A. Type of wastewater - the discharge of treated process wastewater and process area stormwater; utility wastewater including power plant blowdown; well water; resin bed regeneration water; sanitary wastewater; miscellaneous ~~deminimis~~ discharges such as hydrostatic test wastewater; and commingled first flush wastewaters (the first 0.1 to 0.6 inches of effluent from the collection basins) from Outfalls 010, 014 and 020.
- B. Location - at the point of discharge from the final wastewater treatment process unit prior to combining with any other waters and/or Monte Sano Bayou, at Latitude 30°30'06", Longitude 91°10'31".
- C. Treatment - treatment of wastewaters consists of:
 - equalization
 - neutralization
 - dissolved air flotation unit (DAF)
 - biological oxidation basin
 - clarification
- D. Flow - Continuous, (Max 30-Day) 2.7 MGD
- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

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Outfall 010

- A. Type of wastewater - the combined discharge of stormwater, well water, power plant blowdown and condensate.
- B. Location - at the point of discharge from Collection Basin No. 10, prior to combining with other waters, at Latitude 30°30'04", Longitude 91°10'24".
- C. Treatment - None

*commingled first flush wastewater (the first 0.1 to 0.6 inches of effluent from the collection basin) is routed to the biological treatment system and discharged through Outfall 001.
- D. Flow - Intermittent
- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

Outfall 014

- A. Type of wastewater - the combined discharge of stormwater, well water, power plant blowdown and condensate.
- B. Location - at the point of discharge from Collection Basin No. 14, prior to combining with other waters, at Latitude 30°30'06", Longitude 91°10'35".
- C. Treatment - None

*commingled first flush wastewater (the first 0.1 to 0.6 inches of effluent from the collection basin) is routed to the biological treatment system and discharged through Outfall 001.
- D. Flow - Intermittent
- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

Outfall 015

- A. Type of wastewater - the discharge of well water and stormwater runoff from the fire water reserve area.
- B. Location - at the point of discharge from Collection Basin No. 15, prior to combining with other waters, at Latitude 30°30'07", Longitude 91°10'37".
- C. Treatment - None
- D. Flow - Intermittent

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- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

Outfall 020

- A. Type of wastewater - the combined discharge of stormwater, well water, power plant blowdown and condensate.
- B. Location - at the point of discharge from Collection Basin No. 20, prior to combining with other waters, at Latitude 30°30'15", Longitude 91°10'38".
- C. Treatment - None

 *commingled first flush wastewater (the first 0.1 to 0.6 inches of effluent from the collection basin) is routed to the biological treatment system and discharged through Outfall 001.
- D. Flow - Intermittent
- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current NPDES Permit:

- A. Outfall 001 - Lion Copolymer has requested a reduction in the measurement frequency for BOD₅, COD, and Oil & Grease. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for BOD₅, COD, and Oil & Grease has been changed from 3/week to 1/week.
- B. Outfall 001 - Production has decreased from 2,000,000 lbs/day to 1,750,000 lbs/day of crumb rubber, therefore, limitations for BOD₅, TSS, Oil & Grease, and COD have also decreased. The monthly average and daily maximum limitations have been established in accordance with 40 CFR 428, Subpart B, Emulsion Crumb Rubber Subcategory, for the manufacturing of 1,250,000 lbs/day of styrene/butadiene rubber (SBR). However, this category specifically excludes the applicability of these guidelines to the manufacturing of acrylonitrile/butadiene rubber (NBR), which is equal to approximately 29% (500,000 lbs/day) of the plant's daily production capacity. Therefore, current limitations were based on a combination of promulgated guidelines and best professional judgment (BPJ), in accordance with LAC 33:IX.2707 and LAC 33:IX.3701.
- C. Outfall 001 - A Total Residual Chlorine monitor and report only requirement has been established due to the chlorine impairment in Monte Sano Bayou in order to collect data for

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future TMDL development. The monitoring frequency has been established at once per quarter based on current guidance for TMDL data collection and BPJ.

- D. Outfall 010- Lion Copolymer has requested a reduction in the measurement frequency for TOC and Oil & Grease. This request has been partially granted. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for TOC has been changed from 1/week to 1/month. The frequency for Oil & Grease will remain at 1/week.
- E. Outfall 014 - Lion Copolymer has requested a reduction in the measurement frequency for TOC and Oil & Grease. This request has been partially granted. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for Oil & Grease has been changed from 1/week to 1/month. The frequency for TOC will remain at 1/week.
- F. Outfalls 015 and 020 - Lion Copolymer has requested a reduction in the measurement frequency for TOC and Oil & Grease. This request has been granted. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequencies for TOC and Oil & Grease have been changed from 1/week to 1/month for Outfalls 015 and 020.
- G. Outfalls 010, 014, and 020 - A Total Residual Chlorine monitor and report only requirement has been established due to the chlorine impairment in Monte Sano Bayou in order to collect data for future TMDL development. The monitoring frequency has been established at once per quarter based on current guidance for TMDL data collection and BPJ.
- H. Outfalls 010, 014, and 020 - Total Suspended Solids (TSS) limitations of 30 mg/L Monthly Average and 100 mg/L Daily Maximum have been established at these outfalls due to boiler blowdown discharges. These limitations have been established in accordance with the Boiler Blowdown Wastewater Schedule (Schedule G) of the Light Commercial General Permit, LAG480000.
- I. Outfalls 010, 014, 015, and 020 - Lion Copolymer has requested that the flow monitoring requirement change from continuous to estimate since these outfalls are mainly comprised of stormwater and are intermittent in nature. This request has been granted.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

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A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

1. Outfall 001 - Process Wastewaters

*Outfall 001 - the discharge of treated process wastewater and process area stormwater; utility wastewater including power plant blowdown; well water; resin bed regeneration water; sanitary wastewater; miscellaneous deminimis discharges such as hydrostatic test wastewater; and commingled first flush wastewaters (the first 0.1 to 0.6 inches of effluent from the collection basins) from Outfalls 010, 014 and 020.

Lion Copolymer, LLC, Baton Rouge Plant is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

<u>Guideline</u>	<u>Reference</u>
Rubber Manufacturing Point	40 CFR 428.22 (BPT),
Source Category, Subpart B	428.23 (BAT)
Emulsion Crumb Rubber Subcategory	

Calculations and basis of permit limitations are found at Appendix A and associated appendices. See below for site-specific considerations.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE (LBS/DAY)</u>	<u>DAILY MAXIMUM (LBS/DAY)</u>
Flow	Report	Report (continuous recording)
BOD ₅	700	1,050
TSS	1,248	1,875
Total Residual Chlorine	Report, mg/L	Report, mg/L

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE (LBS/DAY)</u>	<u>DAILY MAXIMUM (LBS/DAY)</u>
Oil & Grease	280	420
COD	6,600	9,900
pH, Std. Units	6.0 (min)	9.0 (max) (continuous recording)

continuous recorder with flow and pH excursions.

Site-Specific Consideration(s)

Flow - The reporting monthly average and daily maximum flow is based on LAC 33:IX.2707.I.1.b.

BOD₅, TSS, Oil & Grease, and COD - Production has decreased from 2,000,000 lbs/day to 1,750,000 lbs/day of crumb rubber, therefore, limitations for BOD₅, TSS, Oil & Grease, and COD have also decreased. The monthly average and daily maximum limitations have been established in accordance with 40 CFR 428, Subpart B, Emulsion Crumb Rubber Subcategory, for the manufacturing of 1,250,000 lbs/day of styrene/butadiene rubber (SBR). However, this category specifically excludes the applicability of these guidelines to the manufacturing of acrylonitrile/butadiene rubber (NBR), which is equal to approximately 29% (500,000 lbs/day) of the plant's daily production capacity. Therefore, current limitations were based on a combination of promulgated guidelines and best professional judgment (BPJ), in accordance with LAC 33:IX.2707 and LAC 33:IX.3701.

Total Residual Chlorine - Monte Sano Bayou is on the 303(d) list as being impaired for chlorine. Based on an addendum to the LPDES permit application, dated February 26, 2007 indicating that Sodium hypochlorite (10-12% concentration) has been used in the cooling tower and fire water systems as a biocide, it has been determined that there is a reasonable potential for chlorine to be present in this discharge. Therefore a Total Residual Chlorine monitor and report only requirement has been established in order to collect data for Total Maximum Daily Load (TMDL) development.

pH - established in accordance with LAC 33:IX.1113.C.1.

2. Outfalls 010, 014, and 020 - Utility Wastewaters & Stormwater

*Outfalls 010, 014, and 020 - the combined discharge of stormwater, well water, power plant blowdown and condensate.

Utility wastewaters being discharged to discrete outfalls receive BPJ limitations/monitoring requirements according to the following schedule:

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> (Mg/L)	<u>DAILY MAXIMUM</u> (Mg/L)
Flow	Report	Report
TOC	---	50
TSS	30	100
Total Residual Chlorine	---	Report
Oil & Grease	---	15
pH, Std. Units	6.0 (min)	9.0 (max)

Site-Specific Consideration(s) for Outfalls 010, 014, and 020

Flow - established based on LAC 33:IX.2707.1.1.b.

TOC and Oil & Grease - The daily maximum limitations have been retained from the current LPDES permit, effective December 1, 2001. These limitations are consistent with similarly permitted discharges.

TSS - Total Suspended Solids (TSS) limitations of 30 mg/L Monthly Average and 100 mg/L Daily Maximum have been established at these outfalls due to boiler blowdown discharges. These limitations have been established in accordance with the Boiler Blowdown Wastewater Schedule (Schedule G) of the Light Commercial General Permit, LAG480000.

Total Residual Chlorine - Monte Sano Bayou is on the 303(d) list as being impaired for chlorine. Based on an addendum to the LPDES permit application, dated February 26, 2007 indicating that Sodium hypochlorite (10-12% concentration) has been used in the fire water systems as a biocide, it has been determined that there is a reasonable potential for chlorine to be present in this discharge. Therefore a Total Residual Chlorine monitor and report only requirement has been established in order to collect data for Total Maximum Daily Load (TMDL) development.

pH - established in accordance with LAC 33:IX.1113.C.1.

3. **Outfall(s) 015 - Stormwater**

*Outfall 015 - the discharge of well water and stormwater runoff from the fire water reserve area.

Uncontaminated or low potential contaminated stormwater discharged through discrete outfall(s) not associated with process wastewater shall receive the following BPJ limitations in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE (Mg/L)</u>	<u>DAILY MAXIMUM (Mg/L)</u>
Flow	Report	Report
TOC	---	50
Oil & Grease	---	15
pH, Std. Units	6.0 (min)	9.0 (max)

Site-Specific Consideration(s)

Flow - established based on LAC 33:IX.2707.1.1.b.

TOC and Oil & Grease - The daily maximum limitations have been retained from the current LPDES permit, effective December 1, 2001. These limitations are consistent with similarly permitted discharges.

pH - established in accordance with LAC 33:IX.1113.C.1.

In accordance with LAC 33:IX.2707.1.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. Calculations, results, and documentation are given in Appendix B.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality

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standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limits:

PARAMETER(S)
None

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. They are also listed in Part II of the permit.

Monitoring frequencies for water quality based limited parameters are established in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

Site-Specific Consideration(s)

None

TMDL Waterbodies

Outfall 001, 010, 014, 015, and 020

The discharges of treated process wastewater and process area stormwater, sanitary wastewater, non-process area stormwater runoff, utility wastewater including cooling water and well water, resin bed regeneration water, and commingled first flush wastewater (the first 0.1 to 0.6 inches of effluent from the collection basins) from Outfalls 010, 014, and 020 (Outfall 001), the combined discharge of stormwater, well water, power plant blowdown and condensate (Outfalls 010, 014 and 020), and well water and stormwater runoff from the fire water reserve area (Outfall 015) are to Monte Sano Bayou, thence to the Mississippi River, Segment No. 070504. The Monte Sano Bayou is listed on the 303(d) report as being impaired with chlorine. A TMDL is scheduled to be completed by March 31, 2010.

Chlorine

Based on an addendum to the LPDES permit application, dated February 26, 2007 indicating that Sodium hypochlorite (10-12% concentration) has been used in the cooling water and fire water systems as a biocide, it has been determined that there is a reasonable potential for chlorine to be present in this discharge. Therefore a Total Residual Chlorine monitor and report only requirement has been established on Outfalls 001, 010, 014, and 020 in order to collect data for Total Maximum Daily Load (TMDL) development.

Outfall 015 consists of stormwater runoff and well water, therefore is not reasonably expected to cause or contribute to further chlorine impairments in the receiving waterbody. No additional requirements were added to this outfall.

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D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall(s) 001 are as follows:

<u>TOXICITY TESTS</u>	<u>FREQUENCY</u>
Acute static renewal 48-hour definitive toxicity test using <u>Daphnia pulex</u>	1/quarter
Acute static renewal 48-hour definitive toxicity test using fathead minnow (<u>Pimephales promelas</u>)	1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

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Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 26%, 35%, 46%, 62%, and 82%. The low-flow effluent concentration (critical dilution) is defined as 82% effluent.

E. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.1/40 CFR 122.44(I)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. Outfall 001 - Process Wastewaters

***Outfall 001** - the discharge of treated process wastewater and process area stormwater; utility wastewater including power plant blowdown; well water; resin bed regeneration water; sanitary wastewater; miscellaneous de minimis discharges such as hydrostatic test wastewater; and commingled first flush wastewaters (the first 0.1 to 0.6 inches of effluent from the collection basins) from Outfalls 010, 014 and 020.

Flow and pH - Continuous monitoring has been retained from the current LPDES permit, effective December 1, 2001.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	Continuous
pH	Continuous(*)

(*) continuous recorder with pH excursion requirements.

TSS - A monitoring frequency of 3/week for the following listed pollutant is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. This monitoring frequency has been retained from the current LPDES permit, effective December 1, 2001.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
TSS	3/week

BOD₅, COD, and Oil & Grease - Lion Copolymer has requested a reduction in the measurement frequency for BOD₅, COD, and Oil & Grease. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for BOD₅, COD, and Oil & Grease has been changed from 3/week to 1/week.

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<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
BOD ₅	1/week
COD	1/week
Oil & Grease	1/week

Total Residual Chlorine - A monitoring frequency of 1/quarter for the following listed pollutant is considered adequate for the protection of the receiving water, its designated uses as stated in Section VI.7, and is consistent with current data collection guidance for Total Maximum Daily Load (TMDL) development.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Total Residual Chlorine	1/quarter

2. Outfall 010, 014, and 020 - Utility Wastewaters & Stormwater

***Outfall 010** - the combined discharge of stormwater, well water, power plant blowdown and condensate.

Flow and pH - A monitoring frequency of 1/week for Flow and pH has been retained from the current LPDES permit, effective December 1, 2001.

Oil & Grease - Lion Copolymer has requested a reduction in the measurement frequency for Oil & Grease. This request has been granted. based on compliance history for this parameters at this outfall. Therefore, a monitoring frequency of 1/week for Oil & Grease has been retained from the current LPDES permit, effective December 1, 2001.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	1/week
pH	1/week
Oil & Grease	1/week

TSS - A monitoring frequency of 1/month has been established in accordance with the frequency established for this parameter in the Boiler Blowdown Wastewater Schedule (Schedule G) of the Light Commercial General Permit, LAG480000.

TOC - Lion Copolymer has requested a reduction in the measurement frequency for TOC. This request has been granted. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for TOC has been changed from 1/week to 1/month.

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PARAMETER	MONITORING FREQUENCY
TSS	1/month
TOC	1/month

Total Residual Chlorine - A monitoring frequency of 1/quarter for the following listed pollutant is considered adequate for the protection of the receiving water, its designated uses as stated in Section VI.7, and is consistent with current data collection guidance for Total Maximum Daily Load (TMDL) development.

PARAMETER	MONITORING FREQUENCY
Total Residual Chlorine	1/quarter

***Outfall 014** - the combined discharge of stormwater, well water, power plant blowdown and condensate.

Flow and pH - A monitoring frequency of 1/week for Flow and pH has been retained from the current LPDES permit, effective December 1, 2001.

TOC - Lion Copolymer has requested a reduction in the measurement frequency for TOC. This request has been denied based on compliance history for this parameter at this outfall. Therefore, a monitoring frequency of 1/week for TOC has been retained from the current LPDES permit, effective December 1, 2001.

PARAMETER	MONITORING FREQUENCY
Flow	1/week
pH	1/week
TOC	1/week

Oil & Grease - Lion Copolymer has requested a reduction in the measurement frequency for Oil & Grease. This request has been granted. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for Oil & Grease has been changed from 1/week to 1/month.

TSS - A monitoring frequency of 1/month has been established in accordance with the frequency established for this parameter in the Boiler Blowdown Wastewater Schedule (Schedule G) of the Light Commercial General Permit, LAG480000.

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PARAMETER	MONITORING FREQUENCY
Oil & Grease	1/month
TSS	1/month

Total Residual Chlorine - A monitoring frequency of 1/quarter for the following listed pollutant is considered adequate for the protection of the receiving water, its designated uses as stated in Section VI.7, and is consistent with current data collection guidance for Total Maximum Daily Load (TMDL) development.

PARAMETER	MONITORING FREQUENCY
Total Residual Chlorine	1/quarter

***Outfall 020** - the combined discharge of stormwater, well water, power plant blowdown and condensate.

Flow and pH - A monitoring frequency of 1/week for Flow and pH has been retained from the current LPDES permit, effective December 1, 2001.

PARAMETER	MONITORING FREQUENCY
Flow	1/week
pH	1/week

TOC and Oil & Grease - Lion Copolymer has requested a reduction in the measurement frequency for TOC and Oil & Grease. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for TOC and Oil & Grease has been changed from 1/week to 1/month.

TSS - A monitoring frequency of 1/month has been established in accordance with the frequency established for this parameter in the Boiler Blowdown Wastewater Schedule (Schedule G) of the Light Commercial General Permit, LAG480000.

PARAMETER	MONITORING FREQUENCY
TOC	1/month
Oil & Grease	1/month
TSS	1/month

Total Residual Chlorine - A monitoring frequency of 1/quarter for the following listed pollutant is considered adequate for the protection of the receiving water, its designated uses as stated in Section VI.7, and is consistent with current data

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collection guidance for Total Maximum Daily Load (TMDL) development.

PARAMETER	MONITORING FREQUENCY
Total Residual Chlorine	1/quarter

3. Outfall 015 - Stormwater

***Outfall 015** - the discharge of well water and stormwater runoff from the fire water reserve area.

Flow and pH - A monitoring frequency of 1/week for Flow and pH has been retained from the current LPDES permit, effective December 1, 2001.

PARAMETER	MONITORING FREQUENCY
Flow	1/week
pH	1/week

TOC and Oil & Grease - Lion Copolymer has requested a reduction in the measurement frequency for TOC and Oil & Grease. Based on compliance history in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequency for TOC and Oil & Grease has been changed from 1/week to 1/month.

PARAMETER	MONITORING FREQUENCY
TOC	1/month
Oil & Grease	1/month

X. Compliance History/DMR Review:

A. Inspections

A compliance inspection was performed on October 31, 2006. The inspector noted several TSS excursions reported on DMRs. No other areas of concern were noted.

A facility inspection performed on December 15, 2005. The inspector noted a few exceedances reported on the DMRs. No other areas of concern were noted.

B. DMRs

A DMR review was done covering the period of November 2004 through March 2007. The following excursions were reported by the permittee:

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<u>DATE</u>	<u>OUTFALL</u>	<u>PARAMETER</u>	<u>REPORTED VALUE</u>	<u>PERMITTED VALUE</u>
11-30-04	001	TSS	5556 lbs/day, daily max	2280 lbs/day, daily max
01-31-05	010	Oil & Grease	26.3 mg/L, daily max	15.0 mg/L, daily max
08-31-05	010	pH	7.5 s.u., monthly avg	6.0 s.u., monthly avg
			10.4 s.u., daily max	9.0 s.u., daily max
09-30-05	001	TSS	2505 lbs/day, daily max	2280 lbs/day, daily max
01-31-06	014	TOC	72.8 mg/L, daily max	50.0 mg/L, daily max
02-28-06	001	TSS	2633 lbs/day, daily max	2280 lbs/day, daily max
05-31-06	001	TSS	2648 lbs/day, daily max	2280 lbs/day, daily max
11-30-06	001	TSS	2479 lbs/day, daily max	2280 lbs/day, daily max

XI. "IT" Questions - Applicant's Responses

IT Questions and Lion Copolymer's responses can be found at Appendix D in the LPDES Permit Renewal Application, dated November 2006.

XII. Endangered Species:

The receiving waterbody, Subsegment 070504 of the Mississippi River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to permit for the discharge described in the application.

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XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet and rationale. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List